Comparisons of Job Characteristics

Focus Occupation: Boilermakers (47-2011)

Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Boilermakers (47-2011)

Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	18.6	17.5	0	Current knowledge level may be sufficient
Public Safety and Security	6.9	10.6	6.6	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	10.4	12.6	>	Current knowledge level is likely sufficient
Chemistry	4.8	10.0	6.4	<<	Extensive education and/or training may be required
Physics	4.3	9.6	7.6	<	Expanded education and/or training may be required
Building and Construction	4.0	9.2	13.8	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Boilermakers (47-2011)

Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Operation Monitoring	6.6	10.7	11.1	0	Current skill level may be sufficient
Operation and Control	5.4	9.6	11.4	>	Skill level is likely sufficient
Troubleshooting	4.5	9.2	9.6	0	Current skill level may be sufficient
Equipment Maintenance	3.5	8.5	9.3	0	Current skill level may be sufficient
Repairing	3.4	8.5	9.2	0	Current skill level may be sufficient
Equipment Selection	3.3	6.5	8.0	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Boilermakers (47-2011)

Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Perceptual Speed	7.4	10.7	8.8	<	Some improvement in abilities may be required
Multilimb Coordination	6.0	10.2	10.3	0	Current ability level may be sufficient
Selective Attention	8.7	10.1	7.3	<<	Extensive improvement in abilities may be required
Auditory Attention	5.9	9.1	7.5	<	Some improvement in abilities may be required
Reaction Time	4.8	8.3	8.9	0	Current ability level may be sufficient
Hearing Sensitivity	5.6	7.9	7.6	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 89

Focus Occupation: Boilermakers (47-2011)

Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Work Activities	Exclusivity of Activity
Inspect machinery or equipment to determine adjustments or repairs needed	42
Install generating plant equipment	95
Maintain or repair industrial or related equipment/machinery	39
Overhaul power-generating equipment or machinery	89
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use pneumatic tools	66
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 78

Focus Occupation: Boilermakers (47-2011) Associated Occupation: Stationary Engineers and Boiler Operators (51-8021)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting tools	18
Dispensing tools	6
Forming tools	2
Gas analyzers and monitors	10
Hearing protectors	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Light and wave generating and measuring equipment	4
Machine tools	7
Measuring and layout tools	3
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Respiratory protection	6
Safety apparel	4
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.